



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,414	10/24/2003	Ronald C. Hawley	ON W20-001-09-US	1931
22854	7590	08/11/2005	EXAMINER	
MOORE, HANSEN & SUMNER, PLLP 225 SOUTH SIXTH ST MINNEAPOLIS, MN 55402			HUSON, MONICA A	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/693,414

Applicant(s)

HAWLEY, RONALD C.

Examiner

Monica A. Huson

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☒ Claim(s) 10 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 120624 120604
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al. (U.S. Patent 5,653,534). Regarding Claim 1, Matsumoto et al., hereafter “Matsumoto,” show that it is known to carry out a process for preparing fiber-reinforced resin for use in molding machines (Abstract) comprising threading at least one fiber strand through a chamber (Figure 1, element 4); intermittently introducing into the chamber thermoplastic resin in a molten state, and thereby coating the fiber strand with thermoplastic resin (Figure 1, element 303; Column 7, lines 40-49); pushing the resin coated fiber strand in a heated state in a barrel housing using a rotatable screw simultaneously with the introduction of thermoplastic resin into the chamber and independently of the action of the screw (Column 11, lines 61-67; Column 12, lines 1-19).

Regarding Claim 2, Matsumoto shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the screw is the feed screw of an injection molding machine (Column 12, lines 7-19).

Regarding Claim 3, Matsumoto shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the molding machine is an inject

Art Unit: 1732

compression machine (Column 12, lines 7-19; It is noted that every injection machine involves a compression element.).

Regarding Claim 4, Matsumoto shows the process as claimed as discussed in the rejection of Claims 1 and 2 above, including a method wherein the fibers are cut by the feed screw inside of the barrel (Column 12, lines 37-44).

Regarding Claim 5, Matsumoto shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein said barrel and screw comprise a compounding extruder in which the fiber and resin are thoroughly mixed into a molten state (Figure 1, elements 113, 140).

Regarding Claim 6, Matsumoto shows the process as claimed as discussed in the rejection of Claims 1 and 5 above, further including forming the extrudate mass from the compounding extruder into a compressible shape and thereafter conveying the shaped mass to a molding machine adjacent to the compounding extruder (Figure 1, elements 113, 140, 150).

Regarding Claim 7, Matsumoto shows the process as claimed as discussed in the rejection of Claims 1, 5, and 6 above, including a method wherein said molding machine is a compression molding machine (Figure 1, element 150; It is noted that every injection machine involves a compression element.).

Regarding Claim 11, Matsumoto shows that it is known to carry out a method for preparing fiber reinforced resin for use in molding machines (Abstract) comprising passing a fiber strand through a chamber (Figure 1, element 4); intermittently introducing into the chamber a thermoplastic resin in a molten state, and thereby coating the fiber strand with thermoplastic resin (Figure 1, element 303; Column 7, lines 40-49); pushing the resin coated fiber strand in a

Art Unit: 1732

heated state into a fluidic conveying mechanism in conjunction with the introduction of thermoplastic resin into the chamber and independently of the action of the fluidic conveying mechanism (Column 11, lines 61-67; Column 12, lines 1-19).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto, in view of Azari (U.S. Patent 5,268,050).

Regarding Claim 8, Matsumoto shows the process as claimed as discussed in the rejection of Claims 1, 5, and 6 above, but he does not show using a transfer molding machine. Azari show that it is known to carry out a method of preparing a fiber reinforced resin wherein the molding machine is a transfer molding machine (Column 9, lines 23-25). Azari and Matsumoto are combinable because they are concerned with a similar technical field, namely, methods of preparing a fiber reinforced resin for use in molding machines. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Azari's transfer molding machine as that in Matsumoto's method in order to produce a specific article that must be transfer molded.

Regarding Claim 9, Matsumoto shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using a profile extruding machine. Azari show

Art Unit: 1732

that it is known to carry out a method of preparing a fiber reinforced resin wherein the screw is the feed screw of a profile extruding machine (Column 9, lines 23-25). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Azari's profile extruding machine as that in Matsumoto's method in order to produce a specific article that must be profile extruded.

#### *Allowable Subject Matter*

Claims 10 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is ~~571-273-8300~~ ~~703-872-9306~~.

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mah  
August 8, 2005



**MICHAEL P. COLAIANNI**  
**SUPERVISORY PATENT EXAMINER**